

## **Technical Data Sheet**

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Material: Ecomass® Compound 4703BI62

Nontoxic alternative to Lead (Pb), radiation shielding applications

Description / Features: Moderate Specific Gravity, Filled Polyurethane (TPU), Good Flexibility

**Processing Method:** Injection Molding

| Physical Properties         |                   |                |          |               |       |
|-----------------------------|-------------------|----------------|----------|---------------|-------|
|                             |                   | English        |          | SI            |       |
|                             | Test Method       | Value          | Units    | Value         | Units |
| Physical Properties         |                   |                |          |               |       |
| Product Form                |                   | Pellets        |          | Pellets       |       |
| Density                     | ASTM D792         | 2.20           | g/cc     | 2.20          | g/cc  |
| Mechanical Properties       |                   |                |          |               |       |
| Tensile Strength            | ASTM D638         | 3,000          | psi      | 21            | MPa   |
| Tensile Modulus             | ASTM D638         | 82,000         | psi      | 566           | MPa   |
| Tensile Elongation at Break | ASTM D638         | 225            | %        | 225           | %     |
| Flexural Modulus            | ASTM D790         | 21,000         | psi      | 145           | MPa   |
| Flexural Strength           | ASTM D790         | 6,200          | psi      | 43            | MPa   |
| Izod Impact Strength        | ASTM D256         | 5.00           | ft-lb/in | 267           | J/m   |
| Processing Information      |                   |                |          |               |       |
| Melt Temperature Range      |                   | 400 - 430      | °F       | 205 - 220     | °C    |
| Mold Temperature Range      |                   | 50 -80         | °F       | 10 - 25       | °C    |
| Mold Shrinkage Rate         | ASTM D955         | 0.007 - 0.009  | in/in    | 0.7 - 0.9     | %     |
| Pre-Drying Conditions       | (do not over-dry) | 2 hrs @ 180 °F |          | 2 hrs @ 85 °C |       |

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